UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

22801 7590 09/21/2009 LEE & HAYES, PLLC

601 W. RIVERSIDE AVENUE SUITE 1400 SPOKANE, WA 99201 EXAMINER

QUELER, ADAM M

ART UNIT PAPER NUMBER

ART UNIT

DATE MAILED: 09/21/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/759,445	01/14/2004	Eric R. Soldan	MS1-1790US	7839		

TITLE OF INVENTION: HIERARCHICAL BIT STREAM MARKUP COMPILATION AND RENDERING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	12/21/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed oth	or transmitting ig the Patent, ierwise in Blo	advance o	rders and notification o a) specifying a new cor	of ma	aintenance fees wondence address;	ill be and/or	mailed to the current (b) indicating a sepa	corresp trate "F	ondence address as EE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.						
LEE & HAYE 601 W. RIVERS SUITE 1400	IDE AVENUE	/2009				Cort	ificato	of Mailing or Trans Transmittal is being ficient postage for first SSUE FEE address 1) 273-2885, on the d	mission		
SPOKANE, WA	. 99201									(Depositor's name)	
										(Signature)	
										(Date)	
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO	NTOR		ATTORNEY DOCKET NO.		CON	CONFIRMATION NO.	
10/759,445 TITLE OF INVENTION	01/14/2004 : HIERARCHICAL BIT	STREAM MA	ARKUP C	Eric R. Soldan DMPILATION AND RE	END	ERING	1	MS1-1790US		7839	
APPLN, TYPE	SMALL ENTITY	ISSUE FEI	E DUE	PUBLICATION FEE DU	Œ	PREV. PAID ISSUE	PAID ISSUE FEE TOTAL FEE(S) DU			DATE DUE	
nonprovisional	NO	\$151	0	\$0		\$0		\$1510		12/21/2009	
EXAM	INER	ART U	NIT	CLASS-SUBCLASS	\neg						
QUELER,	ADAM M	217	В	715-513000	_						
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	nge of Corresp Indication for ed. Use of a C	ondence rm rustomer		ngle or ag uttori be p	3 registered patent ely, firm (having as a gent) and the name neys or agents. If a rinted.	memb s of u	er a 2o to e is 3		it has been filed for	
(A) NAME OF ASSIC	SNEE			(B) RESIDENCE: (CI	TY :	and STATE OR C	OUNT	RY)			
4a. The following fee(s): Issue Fee Publication Fee (N	o small entity discount p	ermitted)	-4	o. Payment of Fee(s): (P A check is enclosed Payment by credit of The Director is here overpayment, to De	d. card	. Form PTO-2038	is atta	ched.			
	s SMALL ENTITY state	is. See 37 CFR		☐ b. Applicant is no l							
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	rired) will not tes Patent and	be accepte Trademark	d from anyone other that Office.	ın th	e applicant; a regis	stered a	ittorney or agent; or th	ne assign	nee or other party in	
Authorized Signature						Date					
Typed or printed name						Registration N					
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.311. The U.S.C. 122 ar USPTO. Tim den, should be NOT SEND	information in inform	on is required to obtain of 1.14. This collection is depending upon the in- e Chief Information Off COMPLETED FORMS	or re estin divid ficer TO	tain a benefit by the mated to take 12 n dual case. Any co y, U.S. Patent and THIS ADDRESS	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, includir s on the amount of tin ark Office, U.S. Dep O TO: Commissioner	I by the ig gathe ne you artment for Pate	USPTO to process) ring, preparing, and require to complete of Commerce, P.O. nts, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/759,445	01/14/2004	Eric R. Soldan	MS1-1790US	7839	
22801 75	90 09/21/2009		EXAM	INER	
LEE & HAYES,	PLLC	QUELER, ADAM M			
601 W. RIVERSIE	E AVENUE	ART UNIT	PAPER NUMBER		
SUITE 1400 SPOKANE, WA 9	9201		2178 DATE MAII ED: 09/21/200	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 348 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 348 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	Applicant(s)				
10/759,445	SOLDAN ET AL.					
Examiner	Art Unit					
Adam M. Queler	2178					

-- The MALING DATE of this communication appears on the cover sheat with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to Amendent filed 7/15/2009,
- The allowed claim(s) is/are 1,3-6,8,10,12-15,22 and 24.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date ______

 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other ___

Application/Control Number: 10/759,445 Page 2

Art Unit: 2178

payment of the issue fee.

1.

EXAMINER'S AMENDMENT An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

Authorization for this examiner's amendment was given in a telephone interview with Elizabeth Zehr on 9/15/09.

The application has been amended as follows:

1. (Currently Amended) A method of compiling formatted video content into a binary format, comprising:

receiving a formatted video content, the formatted video content comprising Extensible Hypertext Markup Language (XHTML) with Cascading Style Sheets (CSS), the formatted video content including a plurality of display objects, each display object having one or more conditions; and

processing the formatted video content with a process that is specific to the format of the video content by pre-cascading the CSS with the XHTML to generate one or more rendering-style records for each of the one or more conditions of each display object, wherein one or more types of interactive input can be the one or more conditions upon which the rendering-style record for each display object is generated; and

compiling the processed video content via a routine specific to a predetermined client to create one or more serialized binary bit streams corresponding to the video content, wherein the serialized binary bit streams preserves the conditions of each display object.

(Canceled).

- 3. (Previously Presented) The method as defined in Claim 1, wherein: the formatted video content includes source content in one or more formats selected from a group consisting of an original markup language, a word processing document format, a spreadsheet format, a slideshow format, a database format, a drawing format, and an electronic mail (email) format.
- 4. (Previously Presented) The method as defined in Claim 1, further comprising: translating the video content in the binary format with a document object model into a document object model hierarchy corresponding to the video content;

Application/Control Number: 10/759,445

Art Unit: 2178

gathering each different style of translated video content based on different pseudo-class selectors; and

presenting the gathered video content at the predetermined client using the document object model hierarchy.

- 5. (Previously Presented) The method as defined in Claim 4, wherein the formatted video content includes an original markup language, wherein the presenting the gathered video content includes presenting the layout, rendering, UI interaction, and dynamic aspects of the video content from the original markup language, and wherein the presented gathered video content includes form elements, scrolling, navigation, and event handling defined in the video content from the original markup language.
- 6. (Previously Presented) The method as defined in Claim 4, wherein the presenting further comprises reflowing inline elements within a shape consistent with a predetermined display resolution and size.

7. (Canceled).

8. (Currently Amended) The method as defined in Claim 1, wherein the processing the formatted video content with a client-specific routine to convert the formatted video content to binary data includes applying applies styling nodes to each of the elements of the formatted video content, wherein the elements of the formatted video content which have similar styling are applied to the same styling node.

9. (Canceled).

10. (Currently Amended) A computer storage medium storing instructions that when executed cause one or more processors to:

receiving-receive a formatted video content, the formatted video content comprising Extensible Hypertext Markup Language (XHTML) with Cascading Style Sheets (CSS), the formatted video content including a plurality of display objects, each display object having one or more conditions:

process the formatted video content with a process that is specific to the format of the video content by pre-cascading[[e]] the CSS with the XHTML, via a first routine specific to the format of the video content, to generate one or more rendering-style records for each of the one or more conditions of each display object, wherein one or more types of interactive input can be the one or more conditions upon which the rendering-style record for each display object is generated;

compile the processed video content with a second routine, wherein the second routine is a client-specific routine specific to a predetermined client, the client-specific routine to create one or more serialized binary bit streams corresponding to the video content, wherein the serialized binary bit streams preserves the one or more conditions upon which the rendering-style record for each display object is generateduser-interface interaction, elements of the video content; and

Application/Control Number: 10/759,445

Art Unit: 2178

transmit, via a head-end in a transmission over a satellite/Cable TV (CATV) network, the one or more serialized binary bit streams to the predetermined client.

- 11. (Canceled).
- (Previously Presented) The computer storage medium as defined in Claim 10, wherein the instructions, when executed cause the one or more processors to further:
- translate the one or more serialized binary bit streams into a document object model hierarchy corresponding to the video content; and

present the translated video content using the document object model hierarchy.

- 13. (Previously Presented) The computer storage medium as defined in Claim 12, wherein the present the translated video content includes presenting form elements, scrolling, navigation, and event handling defined in the video content.
- 14. (Previously Presented) The computer storage medium as defined in Claim 13, wherein:

the video content includes inline images and a shape within which the inline images is to be placed during the presenting; and

the present the translated video content includes reflowing the text within the shape consistent with a predetermined display resolution and size.

- (Currently Amended) The computer storage medium as defined in Claim 10, wherein the video content is in an original markup language—comprising XHTML+CSS.
 - 16-21. (Cancelled)
- (Currently Amended) A Multiple System Operation system (MSO), comprising:
- storage for video content in an original markup language that includes layout, rendering, UI interaction, and dynamic aspects of the video content,
- wherein the video content <u>comprises Extensible Hypertext Markup</u> <u>Language (XHTML) with Cascading Style Sheets (CSS) and includes a plurality of display objects, each display object having one or more conditions; and</u>

one or more headends each having one or more servers, wherein each server includes a compiler to:

compile the <u>processed</u> video content in the original markup language into video content with a routine specific to a predetermined client to create one or more serialized binary bit streams corresponding to the video content, wherein the serialized binary bit streams preserves in a binary format that includes the layout, rendering, Ul interaction, and dynamic aspects of the video content from the original markup language, the compiler to (11) determine a

elient-specific routine specific for a predetermined client for rendering the video content in the binary format to be consistent with the original markup language, and to (2) process the video content in the original markup language with (a) a markup-specific routine that is specific to the original markup language, and (b) the client-specific routine determined via the compiler of the server, wherein the compiler processes the video content via a markup-specific routine pre-easeades the original markup-language-to generate one or more rendering-style records for each of the one or more conditions of each display object, wherein one or more types of interactive input can be the one or more conditions upon which the rendering-style record for each display object is generated.

23. (Canceled).

24.(Original) The MSO as defined in Claim 22, wherein each of said headends is to broadcast on a network selected from the group consisting of:

a cable television broadcasting network;

a satellite television broadcasting network;

an air wave broadcasting television network;

a local area network;

a wide area network; and

the Internet.

25-41. (Canceled).

2. The following is an examiner's statement of reasons for allowance: The addition of the CSS generated rendering records to the binary bit stream for the conditions of interactive input (e.g., CSS pseudo-classes), in combination with other claimed limitations is not taught or suggested in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/759,445 Art Unit: 2178

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Adam M. Queler whose telephone number is (571)272-4140.
 The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Adam M Queler/ Primary Examiner, Art Unit 2178